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NOBODY SAYS NO: STUDENT SELF-CENSORSHIP IN A COLLABORATIVE KNOWLEDGE BUILDING ACTIVITY

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Abstract

This paper explores student self-censorship within an online learning environment. Self-censorship in group activity can be seen as a two-edged sword. While it can be advantageous that a student censor personal frustration and angst when working with others, if the self-censorship impacts on the cognitive contribution a student makes then this may significantly impact upon the overall quality of the group's collective knowledge artefact. This paper reports on a study where it was found that students had self censored both their feelings and ideas as they collaboratively worked together.

Keywords

self-censorship, CSCL, group work, team, knowledge building

Introduction

As the notion of the knowledge worker/learner takes hold in universities, the range of learning and assessment activities are invariably moving from traditional print and face-to-face modes to those of a digital nature – with the concomitant challenge being more so related to pedagogy and social infrastructure, than to the technology (Burnett & Roberts, 2005). Arguably at play also is a “pull effect” where student engagement with online social networking and other digital technologies is leading many educators to believe that this practice and enthusiasm should be harnessed for educational use (Mason & Rennie, 2008). Invariably underpinned by constructivist understandings, the way we prepare university students for their future lives is seen as needing to be increasingly collaborative in nature (The New Media Consortium, 2010).

There is considerable evidence to support the benefits of collaborative team-based approaches (Page, 2007; Roberts, 2007). Collaborative work in virtual teams seemingly maps nicely to the notion of equipping individuals for 21st Century work, where technology is a tool to think with (Bereiter, 2002; Brown, 2002). However, within collaborative learning environments, the importance of social context and the role of social interaction in the process of constructing knowledge and understanding should not be underestimated (Bielaczyc, 2006; Pritchard, 2010). In particular, any failure of productive collaboration among group members may have a detrimental effect on both individual learning and collective knowledge development (Puntambekar, Erkens, & Hmelo-Silver, 2011). Thus, within the research literature, much has been written about how productive collaboration amongst group members can be established and maintained. Three major factors that influence the quality of collaboration that emerge from this literature are diversity, conflict, and self-censorship.

Diversity, conflict and self-censorship

Within the research literature, there is considerable support for the view that heterogeneous teams with *diverse expertise* are more creative and productive than homogeneous teams (see, for example, Guimera, Uzzi, Spiro, & Nunes Amaral, 2005; Hoffman, 1959; Hong & Page, 2004; Houldsworth & Mathews, 2000; Miura & Hida, 2004; Watson, Kumar, & Michaelsen, 1993). *Cognitive diversity*¹ within collaborative teams has also been identified as a determinant of creative teamwork (Levine & Moreland, 2004; Mitchell & Nicholas, 2006). Discourse emanating from different approaches and perceptions associated with cognitive diversity has been found to stimulate divergent thinking in individual members, which is closely linked to creative output (Nemeth & Nemeth-Brown, 2003). There is also considerable support within the literature that productive collaboration is enhanced by *idea diversity* within teams (Mitchell & Nicholas, 2006; Scardamalia, 2002). According to Scardamalia (2002), idea diversity is essential to the development of knowledge advancement, just as biodiversity is essential to the success of an ecosystem. To understand an idea is to understand the ideas that surround it, including those that stand in contrast to it. Idea diversity thus can create a rich environment for ideas to evolve into new and more refined forms. Another form of diversity identified as a factor in effective teams is *diverse membership in terms of team role preference* (Margerison & McCann, 1995, 1997). Margerison and McCann contend that teams with diverse and balanced team role preferences are more effective and efficient than arbitrarily allocated teams.

However, the research literature also indicates that expertise, cognitive and idea diversity within groups may lead to *conflict* (Bunderson & Sutcliffe, 2002; Hakkinen, 2004; Kurtzberg, 2005; Paul, Seetharaman, Samarah, & Mykytyn, 2004). Although conflict has the potential to enhance collaborative learning (Achinstein, 2002; Uline, Tschannen-Moran, & Perez, 2003), it can also seriously inhibit collaborative learning. For example, it can often lead to collaborative learning groups working towards what Rimor, Rosen, and Naser (2010) refer to as *rapid* rather than *integrative consensus*. Rapid consensus is characterised by group members accepting the opinions of their peers not necessarily because they agree with them or have been persuaded but because it is a way to resolve conflict and quickly advance the discussion. If group members readily forego their own ideas simply to complete the task or to maintain group harmony then overall quality is invariably reduced. It also degrades personal knowledge, and may lead to the emergence of a sense of disrespect for some members of the group (Nastasi & Clements, 1992). By contrast, with integrative consensus, group members engage in divergent thinking at the commencement of a task, analyse the conclusions drawn by their peers, are ready to change their own opinions or accept those of their peers, and then engage in convergent thinking to optimise the divergent possibilities (Milliken, Bartel, & Kurtzberg, 2003; Stahl, 2006) to complete a task. Thus, with integrative consensus, a convergence of thinking occurs without degrading to a point of overly striving for group consensus epitomised by the idea of groupthink (Dimitroff, Schmidt, & Bond, 2005; Green, Lee, & McCalman, 2005; Janis, 1982).

Conflict can also lead to self-censorship (Janis, 1982) by members of a team (Gillespie, Guerrero, Gonzalez, Millhollen, & Chrispeels, 2006; Hayes, Glynn, & Shanahan, 2005). Self-censorship can be defined as the *conscious withholding of one's true opinion from an audience perceived to disagree with that opinion* (Hayes et al., 2005; Williams, 2002). A review of the research literature indicates that in addition to avoiding conflict, there are many other reasons why a person may engage in self-censorship such as concerns about offending someone or hurting their feelings, and concerns about appearing to be a non-conformer (Hayes et al., 2005). Kimmerle and Cress (2008) provide another possible source of self-censorship: self-presentation. Self-presentation refers to strategic activities utilised by individuals and designed to give certain impressions to other people (Goffman, 1959). Kimmerle and Cress believe that an individual's need for self-presentation plays an important role in their willingness to share their knowledge with others.

Within the CSCL literature, few references have been made to self-censorship and its influence on learning within CSCL groups. However, much has been written about self-censorship in other fields of research such as management, public opinion, media studies, science and political science. A review of the research literature from these diverse fields indicates that self-censorship can have many negative outcomes. For example, self-censorship can:

¹ Cognitive diversity is defined as variation in underlying and invisible cognitive processes such as attitudes, beliefs or values (Tegarden, Tegarden, & Sheetz, 2003).

1. have negative consequences for decisions made by organisations, communities and entire societies (Sunstein, 2003);
2. lower the quality and creativity of group decisions (Perlow, 2003; Williams, 2002); and,
3. be detrimental to a work group's creative potential (Milliken et al., 2003).

The willingness of participants to share their knowledge and the information they possess is a crucial prerequisite for collaborative learning (Kimmerle & Cress, 2008). Indeed, according to Hinds and Kiesler (2002), benefiting from other's knowledge by reciprocally exchanging information is the essence of efficient collaborative teamwork. Thus, it is quite possible that self-censorship could have similarly negative consequences for individual learning and collective knowledge development within CSCL communities. Indeed, it could be a major factor in predicating the poor decision-making and low levels of creativity characteristic of teams engaging in rapid consensus forming.

In this paper, we report on a study conducted with pre-service teachers engaged in an online task to collaboratively develop a teaching resource. Over the duration of the study, it became evident that the participants engaged in much self-censorship; they had a marked reticence to disagree with each other even at minor levels within the online task. After describing how the study was conducted and reporting the key findings with regards to self-censorship, we will discuss some possible implications of self-censorship for pre-service teachers' on-line collaborative learning.

Method

The study was conducted in the context of a pre-service teacher education course for business education teachers at a large metropolitan university on the east coast of Australia. The business education pre-service teachers were engaged in a computer supported collaborative knowledge building task, namely the development of a guiding principles model that they could use to inform their subsequent teaching. The overall aim of the study was to determine if teams that have diverse membership in terms of team role preference (Margerison & McCann, 1995, 1997) were more effective and efficient in their knowledge-building of the guiding principles model within a CSCL environment than arbitrarily allocated teams.

Margerison and McCann's team role theory contends that individuals have preferred ways of working and that balanced combinations of individuals are more likely to be successful than those teams where a full range of team roles is not evident or, more particularly, where the team is skewed in its terms of its composition. Margerison and McCann identified eight types of team roles:

- (1) *Reporter-Advisor* (People who enjoy giving and gathering information);
- (2) *Creator-Innovator* (Those who like to come up with new ideas and different ways of approaching tasks);
- (3) *Explorer-Promoter* (People who enjoy exploring possibilities and looking for new opportunities);
- (4) *Assessor-Developer* (Those who prefer to work where they can analyse alternatives and develop ideas to meet the practical constraints of the organization);
- (5) *Thruster-Organiser* (People who like to thrust forward and get results);
- (6) *Concluder-Producer* (Those who prefer working in a systematic way to produce outputs);
- (7) *Controller-Inspector* (People who enjoy focusing on the detailed and controlling aspects of work); and,
- (8) *Upholder-Maintainer* (Those who like to uphold standards and values and maintain team excellence).

Because individuals demonstrate varying strengths in two or three naturally occurring team roles, a team need only be made of from three to five members. The key point is that, in forming any team, there is a need to have a balance of role preferences, particularly in relation to the major role, if the team is to be successful.

Participants

The participants in the study were twenty-seven pre-service business education teachers divided into nine teams of three members. Nineteen of the participants were on-campus students and eight were off-campus students. By requiring both on- and off-campus pre-service teachers to work collaboratively on a formative activity, a number of benefits were expected to accrue from the online discussion forum activity affording a digital bridge (Larson, 2002) between the pre-service teachers studying on campus and those studying off-campus. Off-campus pre-service teachers tend to be older and may even be working within education so they are frequently able to provide real world insights. On-campus pre-service teachers are able to relay in-class information and, as a side benefit, hopefully break down the sense of isolation the off-campus pre-service teachers may feel.

Procedure

The study proceeded in four phases. These were: (1) Formation of teams; (2) Orientation; (3) Online Knowledge-Building Task (Duration = 45 days); and, (4) Evaluation of guiding principles models.

Formation of teams

The process of forming teams began with ranking each participant in terms of their business education subject-matter knowledge (SMK) and pedagogical content knowledge (PCK). Three data sources were used to derive an aggregated score to rank the participants in terms of their SMK and PCK about business education:

- I. scores derived from the analyses of concept maps created by each participant about four focus business and accounting schemas: business environment, strategy, structure and accounting (SMK);
- II. scores derived from the analyses of concept maps created by each participant about four focus business and accounting teaching and learning schemas: learning styles, teaching approaches, learning activities, and learning environments (PCK). Using a method adapted from Chinnappan, Lawson and Nason (1999), each SMK and PCK concept map generated by the participants was awarded by a panel of two experts in business education a numerical score based on completeness, correctness and linkages between ideas; and,
- III. Grade Point Average scores of the participants prior to their enrolment in the curriculum subject (SMK and PCK).

After aggregated scores to rank the participants in terms of their SMK and PCK had been generated, each participant was administered the Margerison-McCann Personal Team Management Profile (TMP) Questionnaire to determine their team role preference.

Following this, the participants were divided into teams of three. Where possible, each team of three consisted of two on-campus students and one external student. The eight off-campus students formed the base for eight of the nine teams. Five of the teams were balanced in terms of team role preference (as measured on the Margerison-McCann TMP); that is, members were allocated so that there was a balance of roles and where all work preferences were covered. The other four teams had members randomly allocated in terms of team role preference. To ensure academic equivalence between the “balanced” and “random” teams, minor adjustments were made to the membership of each of the teams to ensure that the average aggregated scores for SMK and PCK of the balanced and random teams were as equivalent as possible. In the end, the average of the aggregated scores for the five balanced groups was marginally lower (2%) than average for the four random groups.

Orientation

To ensure that all participants had access to, and were able to navigate their way through the university's Online Teaching site, the participants engaged in two orientation activities. The first activity required them to identify a useful website resource in the area of business education and to then post the website's URL to a discussion forum of the same type to be used for the online activity. The second activity required each participant to reflect on what it means to be a business education teacher in Queensland, Australia. Having reflected on this topic, the participants were then required to post their reflection to an online discussion forum. Both these activities were scaffolded by sets of explicit instructions.

On-Line knowledge building task

During this phase of the study, each team was required to engage in the online collaborative development of a Guiding Principles Model that could be used to inform the development of business curriculum units and lesson plans. This online collaboration involved each member of a team in the processes of generating and posting models on to the online discussion forum, providing questions, comments and propositions to other members of the team via the discussion forum, and in the iterative online revisions of the group's model(s).

Evaluation of guiding principles models

The nine models collaboratively generated by the teams were evaluated by a panel of ten academics within the Education Faculty who had expertise in the areas of business education, teaching and learning theory and practice, and curriculum studies. They were asked to individually rank the models in terms of integration of theory, structure and organisation, and applicability. The academics were subsequently asked to attend a focus group where each academic was asked to present and explain their rankings. Following this, the final ranking of the models was achieved through group process and consensus.

Data

In relation to the consideration of self-censorship, two data sources were used: *discussion forum materials* and *reflective journal entries*.

Discussion Forum materials

The analysis of the discussion forum data focused on the nature and content of the contributions of the team members to the online discourse. In particular, this analysis focused on whether the contributions were knowledge-building, organisational, or social in nature. Knowledge-building contributions were defined as statements that focused on conceptually advancing the progress of the model, organisational contributions were defined as statements that focused on the organisation of producing the model, and social contributions were defined as statements that focused on social interactions between members of the team. Thus, each team's forum transcript was coded using the Functional Category System (FCS) (Poole & Holmes, 1995) such that instances of particular statement types occurring over the duration of the activity could be determined (see Table 1). The approach taken in this study is very similar to the application of the FCS by Jonassen and Kwon (2001) in their study of communication patterns in computer-mediated versus face-to-face contexts in a group problem solving activity.

Table 1. Functional Category System (Poole & Holmes, 1995, p. 104)

Categories	
1. Problem Definition	<ul style="list-style-type: none"> 1a. Problem analysis: Statements that define of state the causes behind a problem 1b. Problem critique: Statements that evaluate problem analysis statements (may be assigned a positive [+] or negative [-] valance)
2. Orientation	<ul style="list-style-type: none"> 2a. Orientation: Statements that attempt to orient or guide the group's process 2b. Process reflection: Statements that reflect on or evaluate the group's process or progress
3. Solution Development	<ul style="list-style-type: none"> 3a. Solution analysis: Statements that concern criteria for decision-making or general parameters for solutions 3b. Solution suggestions: Suggestions of alternatives 3c. Solution elaboration: Statements that provide detail or elaborate on a previously stated alternative. They are neutral in character and provide ideas or further information about alternatives 3d. Solution evaluation: Statements that evaluate alternatives and give reasons, explicit or implicit, for the evaluations. They may be assigned a positive [+] or negative [-] valence 3e. Solution confirmation: Statements that state the decision in its final form or ask for final group confirmation of the decision. They may be assigned a positive [+] valence if they argue for confirmation, or neutral (/) valence if they merely ask for confirmation. Negative responses are to 3e are coded 3d-
4. Non task	Statements that do not have anything to do with the decision task. They include off-topic jokes and tangents
5. Simple agreement	
6. Simple disagreement	

A doctoral and master's student from the medical sciences field were trained for three hours in the FCS (Poole & Holmes, 1995). The two coders independently categorised the communication acts within each team's discussion forum transcript and achieved an inter-rater reliability of 0.829 based on a sample of 50% of the transcripts. Given that the two coders were working independently, the high level of agreement achieved in the coding process is again representative of "investigator triangulation" (Yin, 2009, p. 116) and, as such, provides a considerable level of confidence in the coding process. The initial categorisation was completed with the coders working on hardcopy transcripts using coloured highlighter pens to indicate each of the FCS communication categories. Where it was evident that differing coding had been made to the same portions of the transcript, a consensus approach was undertaken by the two coders together with one of the researchers.

Reflective journal entries

All pre-service teachers in this study were provided with a blank journal and the requirement to maintain a journal was listed in the outline for the unit. The journal was provided to internal pre-service teachers in the tutorial and to external pre-service teachers via their external unit materials. The data from the reflective journal was qualitatively analysed using an approach suggested by Miles and Hubermann (1994). In particular, the analysis of the reflective journal entries focused on contrasts and comparisons between the outcomes of the FCS analysis of each participant's Discussion Forum entries and their statements in their Reflective Journal entries.

Results

As the data from the online Discussion Forum was analysed, it became evident that the participants in the study, whether they be in balanced or arbitrarily-allocated teams, had a marked reticence to disagree with each other, even at minor levels, within the online task. Over the entire duration of the knowledge-building activity (45 days), not one individual made a statement that could be categorised within the Functional Category System as Simple Disagreement. Given that there were a total of 1,863 FCS statements coded over the duration of the activity, it is suggested that it is more than mere aberration that no instance of a Simple Disagreement statement was recorded. Furthermore, there also seemed to be a lack of strongly critical Problem Definition-, Orientation-, or Solution Development-categorised comments between the members of most teams in the online Discussion Forum.

The analysis of the individual reflective journals indicated that this reticence to disagree and/or proffer strongly critical comments was mainly due to self-censorship on the part of the participants. Of interest was the strength of feeling often evident within their journal writing around a particular issue that was not reflected in the manner in which they engaged in the online Forum discussion.

Sources of self-censorship

Six sources of self-censorship were identified: *self-presentation, maintaining group harmony, concern for others, equity of contribution, focus on completion of the task, and perceived lack of power*. The students cited in this section, from differing allocated teams ($n=27$) have been given a pseudonym.

Self-Presentation

Self-presentation refers to strategic activities adopted by individuals designed to give certain impressions to other people (Goffman, 1959). The analysis of the individual reflective journal data indicated that many participants did not want to be perceived as being outside the group norms. This was manifested in two ways: *not wanting to give the impression of superiority* and by contrast *not wanting to give the impression of inferiority*.

In order to not alienate their team members, many participants went out of their way to ensure that their contributions to the online Discussion Forum were carefully worded to not sound like they were being condescending to or authoritarian with their other team members. As Marina from Team 5 explained in her individual reflections:

I posted some ideas re getting started, being very careful with wording. Difficult to make suggestions that don't sound like commands when there isn't body language/voice expression etc.

Other participants also noted the difficulty caused by lack of body language/voice expression in the online forum discussions. This, it seemed, tended to force them to play it more conservatively when it came to making online contributions than they may have done in face-to-face discourse.

For example, at the conclusion of the task, Hanna (Team 9) commented publicly in the forum, that “[i]t has been wonderful working with you both.” However Hanna’s journal seemingly indicated levels of trust had eroded over the task commenting that:

I think the three of us involved in our group are pretty chatty, but I felt that it was too easy to be misunderstood so made fewer and fewer personal contributions throughout the project. I don't feel like I know these women and would not feel comfortable approaching them and starting a conversation on anything but this project.

The difference in Hanna's public versus private views illustrates again also the extent to which team members appear to self-censor their contributions.

Playing it conservatively also seemed to be the participants' strategy when they tried to avoid giving the impression of inferiority. Rather than risk making what they feared their team partners may perceive as an imprudent contribution, many participants sometimes chose to wait and see. This sentiment is clearly expressed in the individual reflections of Nadina and Tamsin:

I will have to wait and see what Marcus and Tamsin suggest. We also like each other's ideas, but we're not doing anything concrete about it (Nadina, Team 7).

I was going to wait for someone else to come up with the idea which is what I usually do. I'm kind of hoping I won't need any more flashes of inspiration and someone else will actually draw the map (Tina, Team 1).

However, probably the most eloquent expression of concern about not wanting to give the impression of inability and being out of one's depth probably came from Krista:

Today I finally did it. I wrote my first message online. I was a pretty excited and relieved to see that everything worked I am however still really concerned about what is required of me or where to start (Krista, Team 9).

Maintaining group harmony

Within all teams, it was evident that there was, inherently, a desire to maintain team harmony and produce a convergence of ideas, akin to the notion of *groupthink*. Many students readily reported that they were holding back or "sacrificing their ideas for the sake of group harmony" (Cynthia, Team 5).

Concern for others

Not wanting to offend other members of their teams was a major factor that led to self-censorship by many of the participants in this study. This is well exemplified by the following excerpts from the reflections of Marina and Tanya.

Corinne has posted a flowchart. I find it difficult to follow - will not answer today as I know she has worked hard on it and I cannot think of positive comments (Marina, Team 5).

I want to get the group moved into little faster but I don't want to offend anyone by saying anything (Tamsin, Team 7).

Equity of contribution

Frustration with lack of contribution towards the construction of a Guiding Principles Model from other members of their teams at times led to some of the participants deciding not to make any further online contributions. This frustration was clearly expressed by Annette and Tanya.

I am not contributing any more of my time and info until my other group member's surface!!! (Alison, Team 4)

Motivation is gone! I posted my explanations last night that there has been no response today. I need to hear other people's thoughts so I can continue with the work. When there is no response, I become somewhat disheartened and have no desire or motivation to continue working (Tamsin, Team 7).

Focus on the completing of the task

From the comments made in the personal reflections, it was evident that many participants engaged in what Rimor et al. (2010) referred to as rapid consensus. That is, they reached a point where they were prepared to accept the opinions of their peers not necessarily because they agreed with them or have been persuaded, but because it was a way to resolve conflict and quickly advance with the discussion. For example, Corinne commented:

I don't want to drag this out longer than it needs. I definitely don't agree with where it is going, but I want to get it done so I'm going along with it (Corinne, Team 5).

Perceived lack of power

This particular source of self-censorship usually occurred when a change of power balance occurred within a team. For example, in Team 5, Cynthia took over control of the design process. Marina reacted this in her reflections by commenting:

Partly my fault - she stated that she was happy to do the designing for us - I did not disagree - however now I find that Cynthia has total control and I have none (Marina, Team 5).

Impact of self-censorship

Although the literature on self-censorship (see, for example, Milliken et al., 2003; Perlow, 2003; Sunstein, 2003; Williams, 2002) indicates that it generally has negative effects on the knowledge-building activities of teams, the findings from this study indicated that like conflict, self-censorship within on-line collaborative learning environments can be a two-edged sword: it can have both positive and negative effects. As the two following case studies indicate, much depends on the sources and the focus of the self-censorship behaviour.

The focus of the self-censorship in both of the teams was two-dimensional in nature. First, it was on the establishment and maintenance of a productive learning relationship. Second, it was on cognitive leadership and quality of group output. Thus, as can be seen in Tables 2 and 3, both teams initially engaged in self-presentation self-censorship. It is suggested that members with Team 5 (Table 2) self-censored in a manner that resulted in *rapid consensus* and consequently the development of a less optimum knowledge building artifact than may have been achieved if all team members had contributed in a manner that led to integrative consensus.

Table 2. *Self-Censorship by Team 5*

Episode	Description	Cause of Self-Censorship
1	Marina commented in her journal (July 29) that "I posted some ideas re getting started – being very careful with wording. Difficult to make suggestions that don't sound like commands isn't body language/ voice expression etc."	Self-Presentation
2	Cynthia had downloaded the concept mapping software from the Internet and was busy integrating Marina's ideas into the concept map. During part of the discussions Cynthia suggested that Marina also download the concept mapping software. However, Marina was concerned that she and Cynthia "seemed to be at tangents and was somewhat annoyed, seeing herself now as the only one continuing on the research path that she had established for the team. Possibly more to the point, she noted in her journal (August 20) that "I now find that Cynthia has all the control and I have none."	Perceived Lack of Power

3	After a failed effort download the concept mapping software, Marina then made it clear in the forum that she would work in Excel given that she could do so quickly and efficiently. Cynthia politely relented and agreed to also work in Excel, providing a rationale for doing so in her journal (August 20) commenting that "I've been sacrificing my ideas to Marina's for the sake of group harmony, and because I don't want to drag this out longer than it needs."	Maintaining Group Harmony + Focus on Completing Task
4	The power balance had shifted and Cynthia commented in her journal (August 22) that "Marina seems more than happy to do all the thinking and organising. I'm feeling bitchy writing this but Marina doesn't seem very flexible in the whole scenario. Despite her frustrations Cynthia did continue to work actively, though clearly the contested viewpoints remained. Even towards the end of the activity Cynthia was recording in her journal (September 2, Day 41 of 45) that "I am still trying to get Marina to see that it's not an information model but a guiding principles model." In the end however, Cynthia seemingly just wanted it over and so her final post to the forum was "I like it Marina, I say we go with it as it is."	Perceived Lack of Power Maintaining Group Harmony Focus on Completing Task

By contrast, in the case of Team 8 made up of Matt, Shelly and Kerrin (Table 3), it can be argued that because the self-censorship smoothed over potentially damaging conflict episodes and facilitated a process of integrative consensus. Thus, in many respects this team produced a result that was seemingly representative of their collective efforts.

Table 3. *Self-Censorship by Team 8*

Episode	Description	Cause of Self-Censorship
1	Perhaps the clearest contradiction was that shown by Matt (Team 8) who reacted very strongly in his journal and the attempts of Shelly to redirect the team's efforts after an absence. Leading up to this, from Shelly's perspective she recorded in her journal her unambiguous confidence in her own abilities and wrote, "I have been following my group's interactions and they're doing really well but I think that I will have to guide them a little" suggesting also that she felt "that the way Kerrin and Matt are attempting this model is not to a level that I would expect."	Self-Presentation
2	Matt recorded Shelly's return to the task in his journal as follows, "[w]ow she's back and she's taking over. I'm glad she's having a go at it, but kinda pissed off she's gone and taken over. I thought she'd just fit in and go where Kerrin and I were headed."	Perceived Lack of Power
3	Matt then responded in the forum thus, "Hi Shelly – Glad to see that you are back and excellent work on your model" Matt's response provides a useful example that teams do not entirely "rise or fall on how people are (either real or perceived) deep down inside," rather that "[t]hey rise or fall on what they actually do, how they actually behave toward one another on the outside" (Robbins & Finley, 2000, p. 198). 198).	Maintaining Group Harmony
4	Shelly continued to tactfully challenge Matt and Kerrin's work (without directly contesting their ideas)	Concern for others
5	Subsequently both Matt and Kerrin realised that they had	Managing Group

missed some additional pages of work that constituted the totality of Shelly's ideas. They were impressed and with all parties finally understanding each other, the team quickly synthesised their collective ideas to a final product. Matt then went on to explain in the forum how he saw the task being completed.

Harmony

Discussion

This study found that participants significantly self censored their contributions. There was not one instance over the duration of the task where a simple disagreement statement such as “no” or “I disagree” was recorded. Often too, there was considerable incongruity between the participants’ private reflections and their public contributions. A number of individuals reported within their journals that they had modified their approach to avert confrontation within the team. Such self-censoring, like diversity, is seen as very much being a two-edged sword. While the maintenance of group harmony is important, less rigorous exchanges will undoubtedly result in poorer knowledge-building. While perhaps not surprising, participants seemingly worked within what could be termed private and public spaces. Within a participant’s private space (as seen via their reflective journals), all the contested viewpoints and frustrations are found. However, individuals readily censored their private thinking within the public forum, sometimes, to a greater extent than was helpful. Within all teams, be they balanced or arbitrarily-allocated, it was evident that there was, inherently, a desire to maintain team harmony and produce a convergence of ideas and bring the task to completion. Arguably, less than optimum knowledge building occurred where teams made a push to *rapid consensus* rather than *integrative consensus*.

While this study points to the potentially beneficial and problematic nature of self-censorship, it does not propose a means to scaffold positive self-censorship nor approaches to alleviate the sometimes deleterious impact of self-censorship. The development of such scaffolds and approaches continues to provide an ongoing research avenue in the field of Computer Supported Collaborative Learning.

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